

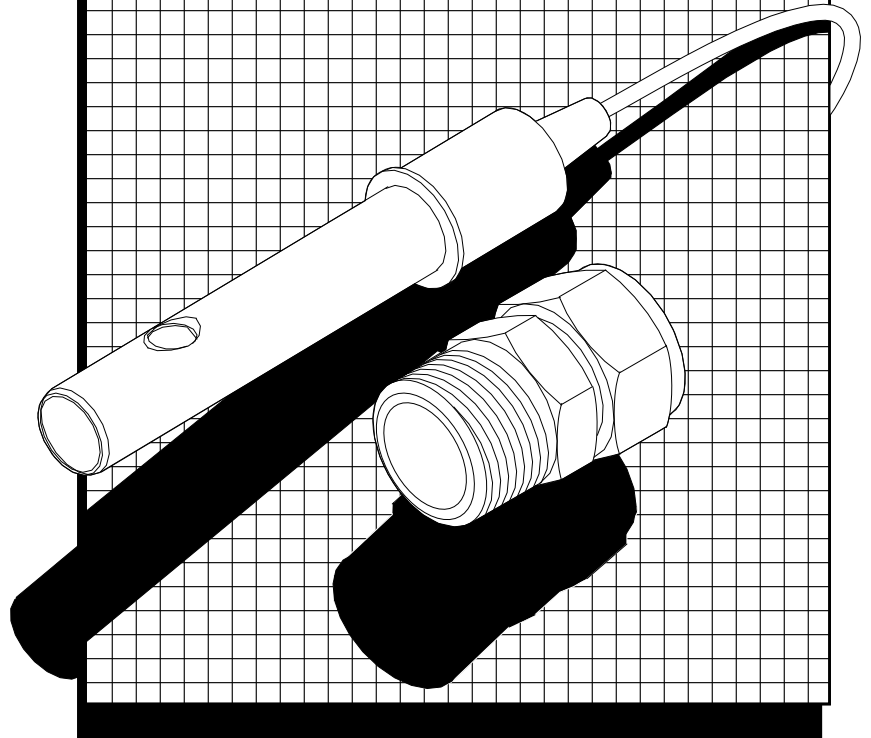


## Model AST10 & 51 CONDUCTIVITY SENSORS

**Small size enables  
convenient installation  
and service**

**O-ring seals used on all  
versions for high  
on-stream reliability**

**Plastic gland fitting  
allows removal and  
replacement without  
tools**

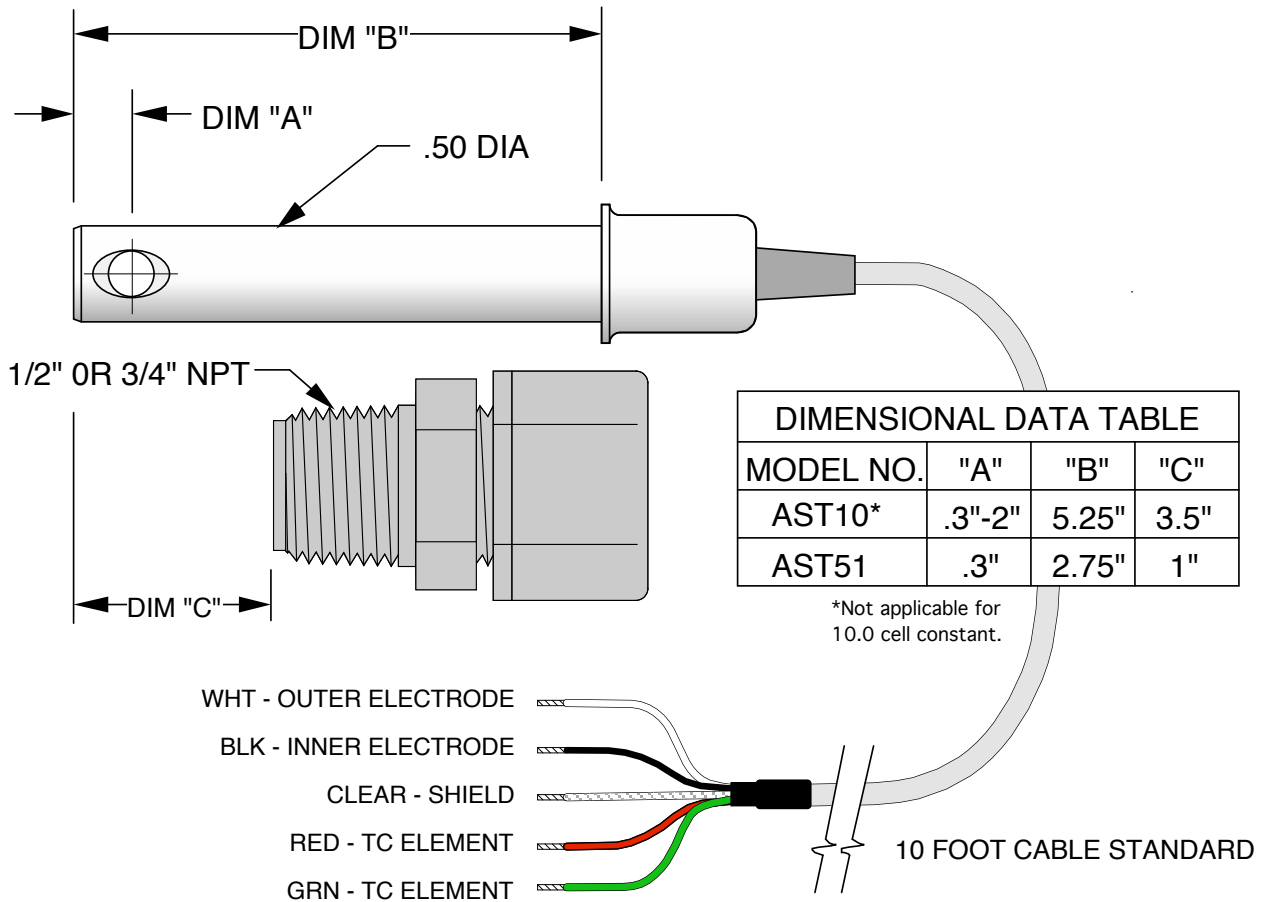


The AST10 and 51 sensors offer a compact design that allows installation into standard pipe fittings in small line sizes such as 3/4" and 1", avoiding the need for special flow cells. Simplicity of the design also allows them to be economically offered in exotic metals for especially corrosive chemical applications.

### **Application Notes**

Wetted materials of construction are 316 stainless steel and Teflon, with double o-ring seals at all points. The outer EPDM o-ring bears the brunt of process interface, allowing the back o-ring to maintain reliable sealing free from chemical attack. An integral temperature element tailored to the analyzer of choice allows automatic compensation for maximum accuracy. Leads are 10' standard, stripped and tinned ends or optional spade lugs.

Process connections are made via a bored through swage fitting with 1/2" or 3/4" NPT threads. This fitting can be screwed into a line, or tank, and it can also be turned around and connected to a standpipe for use in a submersion configuration. The AST51 is good for general purpose use up to about 20,000 micromhos on most analyzers, while the AST10 covers a broader range of cell constants and therefore of conductivities.



## SPECIFICATIONS

### MAX. PRESSURE/TEMP. RATINGS:

100 PSIG at 100°C w/POLYPRO  
 150 PSIG at 120°C w/Kynar  
 200 PSIG at 120°C w/316SS FITTING  
 500 PSIG at 100°C w/316SS FITTING

### WETTED MATERIALS:

**Insulator** - Teflon  
**O-rings** - EPR  
**Metals** - 316SS Standard; Monel, Titanium and Hastelloy C-276 optional.  
**Fitting** - Polypropylene Standard, 316SS and Kynar optional.

### CELL CONSTANTS:

**AST10** - 10.0/1.0/0.1/0.05/0.02/0.01  
**AST51** - 1.0/0.1

### CONNECTIONS:

**Polypropylene Process Fitting** - 1/2" or 3/4" NPT  
**Stainless Steel Process Fitting** - 1/2" NPT  
**Kynar Process Fitting** - 1/2" NPT

**Electrical** - 24 gauge stripped and tinned ends

### TEMPERATURE COMPENSATION:

10KΩ@25°C/32.66KΩ@0°C NTC is standard. Available options include Pt1000, Pt100, 3K BALCO, 8.55K NTC, Ni100 and many others. Reference the make and model of instrument for assistance in selecting the right element.



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